CLAIMS

I	cla	aim:

1. A method in a data processing system for automatically initiating the

replenishment of a consumable product, comprising:

on a first date, fulfilling an order by a consumer for a first instance of the

4 product;

3

5

based upon the first date, estimating a second date by which the first

instance of the product will be fully consumed;

before the second date, providing to the consumer an indication that the product should be replenished, the indicating including a control usable by the consumer to request replenishment of the product;

receiving an indication that the control was used by the consumer to request replenishment of the product; and

in response solely to receiving the indication, ordering a second instance of the product to replenish the first instance.

2. A method in a data processing system for ordering an item, comprising:

on a first date, fulfilling an order by a consumer for a first item;

determining a target date for suggesting replenishment of the first item, the target date based upon the first date and the identity of the first item;

on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a control usable by the consumer to request replenishment of the first item;

receiving an indication that the control was used by the consumer to request replenishment of the first item; and

4

5

6

7

8

9

10

ū
UT
2
ũ
H
W
≘ 2
=
ħ4
uſ
_2

2

1

2

3

1

2

1

- in response solely to receiving the indication, ordering a second item to replenish the first item.
- The method of claim 2 wherein the control is usable by the consumer to request replenishment of the first item by performing a single interaction.
 - 4. The method of claim 2 wherein the second item is a physical article.
 - 5. The method of claim 2 wherein the second item is a data product.
 - 6. The method of claim 2 wherein the second item is a service.
 - 7. The method of claim 2 wherein the target date is determined based on an average life span of the first item.
 - 8. The method of claim 2 wherein the target date is determined based on an expiration date for the first item.
 - 9. The method of claim 2 wherein the target date is determined based on an availability date for the second item.
 - 10. The method of claim 2 wherein the target date is determined based on the length of the intervals between the prior purchases.
 - 11. The method of claim 2 wherein the consumer has made a plurality of prior purchases of a complement of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.
 - 12. The method of claim 2 wherein a target date is determined based on the size of the first item

11

[24976-8020/Reg. App..doc]

A		•
4	_	2
<i>\</i>	P	3
6	}	4
h		5
J		6
	L	7
	M	
	H	1
	E E	2
		_
	13 H	3
	IV In	4
		5
		6
		7

- 1 13. The method of claim 2 wherein the target date is determined based 2 on information provided by the consumer.
- 1 14. The method of claim 2 wherein a target date is determined based on information about the consumer's lifestyle.
 - 15. A computer-readable medium whose contents cause a computer system to order an item by:

receiving an indication of an order by a consumer for a first item having a first date;

determining a target date based upon the identity of the first item; and on the target date, providing to the consumer an indication that the first item should be replenished.

16. The computer-readable medium of claim 15 wherein the provided indication includes a control usable by the consumer to request replenishment of the first item, the method further comprising:

receiving an indication that the control was used by the consumer to request replenishment of the first item; and

in response to receiving the indication, ordering a second item to replenish the first item.

- 1 The computer-readable medium of claim 16 wherein the control is 2 usable by the consumer to request replenishment of the first item by performing a single 3 interaction.
- 1 18. The computer-readable medium of claim 15 wherein the first date is 2 a date on which the order for the first item was placed.

	1	
	2	
	1	
5	1	
=	2	
has be den hat may been the But	1	
	3	

2

- 1 19. The computer-readable medium of claim 15 wherein the first date is 2 a date on which the order for the first item was fulfilled.
- 1 20. The computer-readable medium of claim 15 wherein the target date 2 is determined based on an average life span of the first item.
 - 21. The computer-readable medium of claim 15 wherein the target date is determined based on an expiration date for the first item.
 - 22. The computer-readable medium of claim 15 wherein the target date is determined based on an availability date for the second item.
 - 23. The computer-readable medium of claim 15 wherein the consumer has made a plurality of prior purchases of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.
 - 24. The computer-readable medium of claim 15 wherein the consumer has made a plurality of prior purchases of a complement of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.
 - 25. The computer-readable medium of claim 15 wherein a target date is determined based on the size of the first item.
- The computer-readable medium of claim 15 wherein the target date is determined based on information provided by the consumer.
- 27. A method in a data processing system for assessing item replenishment, comprising:
- determining that a purchasing entity possesses an item;

1	1 2
Y	1
	2
	3
	4
L	5
	1
F	2
	3
	4
	5
	6

4	determining an expiration time for the item, and
5	scheduling for a time preceding the determined expiration time a
6	communication to the purchasing entity indicating that the item should be replenished.
1	28. The method of claim 27, further comprising delivering the
2	communication at the scheduled time.
1	29. The method of claim 28 wherein the delivered communication
2	contains a control for ordering an additional item to replenish the item.
~	
1	30. The method of claim 29, further comprising:
] 2	receiving an indication that the purchasing entity used the control contained
3	in the delivered communication to order an additional item to replenish the item; and
4	in response to receiving the indication, ordering an additional item to
5	replenish the item.
1	31. A computer-readable medium whose contents cause a data
2	processing system to assess item replenishment by:
3	determining that a purchasing entity is using an item;
4	determining an expiration time for the item; and
5	scheduling for a time preceding the determined expiration time a
6	communication to the purchasing entity indicating that the item should be replenished.
1	32. The computer-freadable medium of claim 31, further comprising
2	delivering the communication at the scheduled time.
l	33. The computer-readable medium of claim 32 wherein the delivered

communication contains a control for ordering an additional item to replenish the item.

	5
	1
١	2
1	3
y	4
	5
	6
EN EN	7
L	8
ļi	
IJ	
	1
	2
UT UT	3
	4
	5

7

1

2

3

1

2

1

2

3

4

34.	The computer-read	lable medium of	claim 33, furt	her comprisi	ng:
receiv	ving an indication th	at the purchasing	g entity used t	he control co	ontained
in the delivered communication to order an additional item to replenish the item; and					
in re	sponse to receiving	the indication,	ordering an	additional	item to
replenish the item.					

35. A system for automatic item replenishment, comprising:

a replenishment targeting subsystem that, for a particular item purchased by a purchaser on a purchased date, determines a target date for replenishment of the item;

a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem a replenishment proposal to order a replacement for the item; and

a replenishment ordering subsystem that orders a replacement for the item responsive to an affirmative response to the replenishment proposal from the purchaser.

- 36. A computer memory containing an item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed, such that, on a current date, for each entry indicating the current date as its target date, a communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry.
- 37. The computer memory of claim 36 wherein the item replenishment data structure further comprises, for each of a plurality of dates, an indication of the entries indicating the date as their target date.
- 38. A generated data signal conveying a item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an

[24976-8020/Reg. App..doc] 15 1-Replenish

7

1

2

1

2

- identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed, such that, on a current date, for an entry indicating the current date as its target date, a communication can be transmitted to the consumer identified by the entry proposing the replenishment of the
- 7 item identified by the entry.
 - 39. A method in a computer system for automatically replenishing an item, comprising

determining that a consumer is using an item;

determining a target date for replenishing the item; and

without intervention by the consumer, placing an order on the consumer's behalf for replenishment of the item within a predetermined tolerance of the target replenishment date.

- 40. The method of claim 39 wherein the consumer has made a plurality of prior purchases of the item, and wherein the target replenishment date is determined based on the length of the intervals between the prior purchases.
- 41. A method in a data processing system for suggesting item replenishment, comprising

determining that a purchasing entity is using an item;

establishing a condition for suggesting replenishment of the item;

testing the condition;

when testing indicates that the condition is satisfied, raising an event; and

when the event is raised, suggesting replenishment of the item to the

8 purchasing entity.

42. The method of claim 41 wherein the established condition is a temporal condition.

